

PATENT ABSTRACTS OF JAPAN

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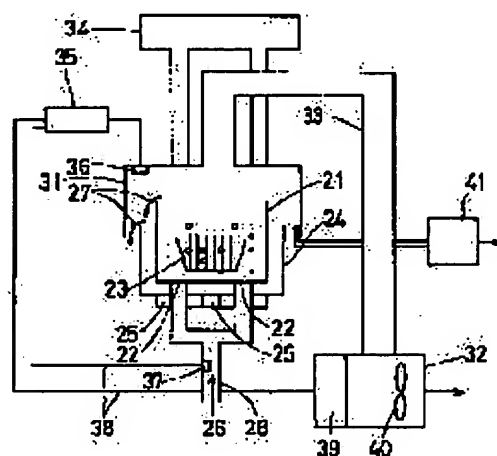
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(54) DEVICE AND METHOD FOR CLEANING SUBSTRATE AND SEMICONDUCTOR DEVICE MANUFACTURED BY THE CLEANING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To improve effectiveness for eliminating the particles of a substrate in supersonic cleaning with dissolved oxygen in a washing liquid and other dissolved gases which is reduced, for example, by vacuum deaeration in advance to prevent a natural oxide film from formed generated in the substrate.

SOLUTION: A cleaning tank 21 for cleaning a substrate, a means 22 for supplying the cleaning liquid to the cleaning tank 21, a ultrasonic vibration generation means 25 for transferring vibrations to the cleaning liquid, a means 32 for reducing the pressure of a region including the surface of the cleaning liquid, and a shield 31 for encircling the region, including the surface of the cleaning liquid and maintaining a reduced pressure are provided. The substrate is subjected to ultrasonic cleaning, while the pressure of the region including the surface of the cleaning liquid is being reduced.



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